



DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

[Docket No. NHTSA-2018-0107 Notice 2]

Weldon, Denial of Petition for Decision of Inconsequential Noncompliance

AGENCY: National Highway Traffic Safety Administration (NHTSA), Department of Transportation (DOT).

ACTION: Denial of petition.

SUMMARY: Weldon, a Division of Akron Brass Company, has determined that certain backup lamps do not fully comply with Federal Motor Vehicle Safety Standard (FMVSS) No. 108, *Lamps, Reflective Devices, and Associated Equipment*. Weldon filed a noncompliance report dated November 7, 2018, and subsequently petitioned NHTSA on November 30, 2018, for a decision that the subject noncompliance is inconsequential as it relates to motor vehicle safety. This notice announces the denial of Weldon's petition.

FOR FURTHER INFORMATION CONTACT: Leroy Angeles, Office of Vehicle Safety Compliance, the National Highway Traffic Safety Administration (NHTSA), (202) 366-5304, Leroy.Angeles@dot.gov.

SUPPLEMENTARY INFORMATION:

I. Overview: Weldon has determined that certain backup lamps it manufactures do not fully comply with paragraph S14.4.1 of FMVSS No. 108, *Lamps, Reflective Devices, and Associated Equipment* (49 CFR 571.108). Weldon filed a noncompliance report dated November 7, 2018, pursuant to 49 CFR part 556, *Defect and Noncompliance Responsibility and Reports*, and subsequently petitioned NHTSA on November 30, 2018, for an exemption from the notification and remedy requirements of 49 U.S.C. Chapter 301 on the basis that this noncompliance is inconsequential as it relates to motor vehicle safety, pursuant to 49 U.S.C. 30118(d) and 30120(h) and 49 CFR part 556, *Exemption for Inconsequential Defect or Noncompliance*.

Notice of receipt of Weldon's petition was published with a 30-day public comment period, on July 15, 2020, in the Federal Register (85 FR 42977). No comments were received. To view the petition and all supporting documents, log onto the Federal Docket Management System (FDMS) website at <https://www.regulations.gov/>. Then follow the online search instructions to locate docket number "NHTSA-2018-0107."

II. Equipment Involved: Approximately 6,315 rear combination lamps manufactured between June 6, 2018, and June 25, 2018, are potentially involved.

III. Noncompliance: Weldon explains that its subject rear combination lamp is noncompliant because its backup lamp does not meet the requirements for color as specified in paragraph S14.4.1 of FMVSS No. 108. Specifically, the subject backup lamp, when tested in accordance with the Tristimulus Method, fell outside the required boundaries for white light.

IV. Rule Requirements: Paragraphs S14.4.1, S14.4.1.4.2, and S14.4.1.4.2.3, of FMVSS No. 108 includes the requirements relevant to this petition. The color of a sample device must comply when tested by either the Visual Method or the Tristimulus Method. When tested using the Tristimulus method, the backup lamp color must comply with the color of light emitted within the following boundaries for white (achromatic):

- $x = 0.31$ (blue boundary)
- $y = 0.44$ (green boundary)
- $x = 0.50$ (yellow boundary)
- $y = 0.15 + 0.64x$ (green boundary)
- $y = 0.38$ (red boundary)
- $y = 0.05 + 0.75x$ (purple boundary)

V. Summary of Weldon's Petition: The following views and arguments presented in this section, "V. Summary of Weldon's Petition," are the views and arguments provided by Weldon and do not reflect the views of the Agency. Weldon describes the subject noncompliance and contends that the noncompliance is inconsequential as it relates to motor vehicle safety.

In support of its petition, Weldon offers the following reasoning:

1. Weldon states that backup lamps are intended to signal to other drivers that a vehicle is in reverse gear. Weldon says that despite the slight deviation from the white color boundaries, the backup lamps, when engaged, are fully illuminated and are still sufficiently white in color that they will not create confusion (at any distance) that the truck is in the reverse gear. The lamps still comply with the luminous intensity photometry requirements of FMVSS No. 108. Weldon contends that even with the color specification noncompliance, these backup lamps fulfill the intended purpose of FMVSS No. 108 as it applies to signal lamps, namely to ensure signals are understood by other road users.
2. Weldon also argues that the vehicles for which the lamps have been supplied have full backup lamp functionality. This creates no safety risk, as the backup lamps are fully functional and remain completely illuminated. Further, Weldon states, the difference in color white light is very slight, so much so that the color is nearly imperceptible to the human eye at any distance. The lamps are sufficiently visible, effective, would not be confused with any other signal lamp, and do not create a safety risk.
3. In considering past petitions involving FMVSS No. 108, Weldon contends that NHTSA has previously considered and found deviations from the standard which were not perceptible to the human eye and/or did not affect the illumination or brightness of the lamp were inconsequential to motor vehicle safety. According to Weldon, NHTSA has found that deviation from the photometric parameters were inconsequential to safety when the overall intensity of the equipment was near to the required parameters to not be perceptible to the human eye. Weldon asserts that NHTSA has historically employed a rule that a margin of up to 25 percent deviation from FMVSS No. 108 photometric intensity requirements is reasonable to grant a

petition of inconsequentiality for noncompliant signal lamps. See “Driver Perception of Just Noticeable Differences of Automotive Signal Lamp Intensities,” (herein, “UMTRI Report”) DOT HS 808 209, Sept. 1994 (described by Weldon as a study sponsored by NHTSA that demonstrated that a change in luminous intensity of 25 percent or less is not noticeable by most drivers and is a reasonable criterion for determining the inconsequentiality of noncompliant signal lamps). According to Weldon, NHTSA has stated that it has granted such inconsequentiality petitions when it was “confident that the noncompliant signal lights would still be visible to nearby drivers.”¹ Moreover, Weldon notes that NHTSA has stated that “because signal lighting is not intended to provide roadway illumination to the driver, a less than 25 percent reduction in light output at any particular test point is less critical.” *Id.* Weldon points out that NHTSA has stated the UMTRI Report’s findings to be “mostly analogous to those of the signal lighting research.” *Id.* Weldon also states that NHTSA granted a petition for a determination of inconsequentiality to General Motors for turn signals that met the photometry requirements in just three of four test groups and produced, on average, 90 percent of the required photometric intensity.² Weldon further states that NHTSA has granted similar petitions for lamps that do not comply with photometric requirements in other slight ways.

4. Conversely, Weldon states that NHTSA has denied inconsequentiality petitions in cases where headlamps do not meet the minimum FMVSS requirements, thus, causing an increased safety risk.³ The purpose of headlamps, as opposed to rear signal lighting, is roadway illumination, which is crucial to road safety. Insufficient

¹ See *General Motors Corporation; Denial of Application for Decision of Inconsequential Noncompliance*, 66 FR 38341 (July 23, 2001).

² See *General Motors Corporation; Grant of Application for Decision of Inconsequential Noncompliance*, 61 FR 1663 (January 22, 1996).

³ See *General Motors Corporation; Denial of Application for Decision of Inconsequential Noncompliance*, 66 FR 38341 (July 23, 2001), for a denial of inconsequentiality petition where points on the headlamp used for overhead sign illumination were substantially below the photometric minimum values, which impaired driver visibility.

roadway illumination from nonconforming headlamps creates an increased safety risk to the public and thus is held to a higher standard than the 25 percent deviation of the UMTRI Report. *Id.* Backup indicator taillamps,⁴ unlike headlamps, do not illuminate the road for drivers, and thus deviation from the FMVSS No. 108 color requirement of the standard does not impede visibility. Weldon says the backup lamps in question are still entirely visible (that is, the brightness of the tail lamps is not affected)⁵ and still appear white to the human eye at any distance, as demonstrated by Weldon's findings. The lamps fulfill the intended purpose of FMVSS No. 108 as it applies to signal lamps, which is to make a driver's operating signals understood. Further, Weldon states that despite the slight deviation from the white light boundaries, the backup lamps would be understood to signal that the truck is in reverse gear and create no additional safety risk and fulfill the intent of FMVSS No. 108.

5. Weldon has not received any reports related to the performance of the lamps from the field and is not aware of any accidents or injuries related to the issue.

Weldon concludes that the subject noncompliance is inconsequential as it relates to motor vehicle safety, and that its petition to be exempted from providing notification of the noncompliance, as required by 49 U.S.C. 30118, and a remedy for the noncompliance, as required by 49 U.S.C. 30120, should be granted.

VI. NHTSA's Analysis: The burden of establishing the inconsequentiality of a failure to comply with a *performance requirement* in a standard—as opposed to a *labeling requirement with no performance implications*—is more substantial and difficult to meet. Accordingly, the Agency has not found many such noncompliances inconsequential.⁶ Potential performance failures of safety-critical equipment, are rarely deemed inconsequential.

⁴ NHTSA notes that Weldon uses the incorrect term “backup indicator taillamps”. NHTSA believes that Weldon is referring to a “backup lamp.”

⁵ NHTSA believes that Weldon means that the backup lamp intensity is not affected.

⁶ *Cf. Gen. Motors Corporation; Ruling on Petition for Determination of Inconsequential Noncompliance*, 69 FR 19897, 19899 (Apr. 14, 2004) (citing prior cases where noncompliance was expected to be imperceptible, or nearly so, to vehicle occupants or approaching drivers).

An important issue to consider in determining inconsequentiality is the safety risk to individuals who experience the type of event against which the recall would otherwise protect.⁷ In general, NHTSA does not consider the absence of complaints or injuries to show that the issue is inconsequential to safety. “Most importantly, the absence of a complaint does not mean there have not been any safety issues, nor does it mean that there will not be safety issues in the future.”⁸ “[T]he fact that in past reported cases good luck and swift reaction have prevented many serious injuries does not mean that good luck will continue to work.”⁹

One purpose of vehicle backup lamps is to indicate that a motor vehicle has engaged its reverse gear and is intending to move in that direction, which is a safety-critical alert to both pedestrians and drivers of other vehicles. Another purpose of the backup lamps is to serve as an illumination device so the driver can see what is behind the vehicle when moving in reverse.¹⁰

As an illumination device, the driver relies on the correct color of light for proper color rendering. Color rendering of the environment, provided by a lamp whose color is within the range of permissible chromaticity coordinates, allows the driver to properly see objects, obstacles, pedestrians, etc. when conducting this maneuver. Based on the chromaticity plot provided by Weldon for this lamp, the lamp color is outside the white boundary as required by FMVSS No. 108. NHTSA does not agree with Weldon’s arguments that the color of light emitted by backup lamps is inconsequential to safety. With respect to Weldon’s argument related to granting other petitions where a deviation from the requirement is not perceptible to the human eye and/or did not affect the illumination or brightness of the lamp, Weldon states in

⁷ See *Gen. Motors, LLC; Grant of Petition for Decision of Inconsequential Noncompliance*, 78 FR 35355 (June 12, 2013) (finding noncompliance had no effect on occupant safety because it had no effect on the proper operation of the occupant classification system and the correct deployment of an air bag); *Osram Sylvania Prods. Inc.; Grant of Petition for Decision of Inconsequential Noncompliance*, 78 FR 46000 (July 30, 2013) (finding occupant using noncompliant light source would not be exposed to significantly greater risk than occupant using similar compliant light source).

⁸ *Morgan 3 Wheeler Limited; Denial of Petition for Decision of Inconsequential Noncompliance*, 81 FR 21663, 21666 (Apr. 12, 2016).

⁹ *United States v. Gen. Motors Corp.*, 565 F.2d 754, 759 (D.C. Cir. 1977) (finding defect poses an unreasonable risk when it “results in hazards as potentially dangerous as sudden engine fire, and where there is no dispute that at least some such hazards, in this case fires, can definitely be expected to occur in the future”).

¹⁰ See 49 CFR 571.108 S4.

its own petition that in the subject noncompliance, there is a noticeable difference between the compliant lamp and the noncompliant lamp when viewed side-by-side.

Equally important, NHTSA does not find Weldon's arguments concerning NHTSA's past decisions related to the research documented in the "Driver Perception of Just Noticeable Differences of Automotive Signal Lamp Intensities" paper relevant to this petition since the application of the study is limited to luminous intensity of signal lamps and irrelevant to color requirements.

VII. NHTSA's Decision: In consideration of the foregoing, NHTSA has decided that Weldon has not met its burden of persuasion that the subject FMVSS No. 108 noncompliance is inconsequential to motor vehicle safety. Accordingly, Weldon's petition is hereby denied and Weldon is consequently obligated to provide notification of and free remedy for that noncompliance under 49 U.S.C. 30118 and 30120.

(Authority: 49 U.S.C. 30118, 30120; delegations of authority at 49 CFR 1.95 and 501.8)

Anne L. Collins,

Associate Administrator for Enforcement.

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